

UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK

CONGREGATION RABBINICAL COLLEGE OF
TARTIKOV, INC., *et al.*,

Plaintiffs,

-against-

07 Civ. 6304 (KMK) (GAY)

VILLAGE OF POMONA, NY; *et al.*,

Defendants.

SUPPLEMENTAL DECLARATION OF BARBARA B. BEALL, PWS, LEED® AP

Barbara B. Beall declares as follows, pursuant to 28 U.S.C. § 1746:

1. As the Director of Natural Resource Services at The Chazen Companies, I am responsible for ensuring that wetlands and ecological issues are appropriately addressed for land development and municipal projects. This includes projects engineered and designed by our company, and those project our company reviews, for example, when working as the municipal designated engineer.
2. This level of responsibility is built upon 30 years of experience working first for the U.S. Army Corps of Engineers in their regulatory branch in Los Angeles and Philadelphia, for the not-for-profit Lake George Association, and for the past 25 years in multi-disciplinary consulting firms.
3. My experience in consulting firms also includes work as an environmental scientist at the LA Group, a Landscape Architecture firm, and now with The Chazen Companies, a multi-disciplinary consulting firm that provides Engineering, Land Surveying, Planning, Landscape Architecture, and Environmental services.

4. While wetlands have been the focus of my career, during my 14 years at Chazen I have worked on and provided consultation advice to both the internal service lines and external clients for over 500 different projects spanning a broad array of activities and areas. I regularly discuss and collaborate with our engineers and Project Managers on project design.
5. Such project design collaboration includes how layouts and design alternatives avoid, minimize and mitigate impacts to wetlands, ecological resources and other natural resources.
6. I also provide guidance to project design engineers on stormwater designs and on Stormwater Pollution Prevention Plans.
7. The following are a small fraction of projects that addressed similar issues raised in my January 19, 2015 Declaration and demonstrate my significant expertise in such areas.

I. Site planning and environmental issues.

8. I have directed off-site alternatives analysis reviews under the Corps of Engineers Section 404(b)(1) Guidelines, which involves review of land use regulations, property characteristics including size, steep slopes, wetlands, etc. I have also reviewed site suitability and alternatives for SEQRA Environmental Impact Statement (“EIS”) documents. I have led and otherwise have been engaged in feasibility analyses and due diligence reviews. This has included directing the use or application of Geographic Information Systems (“GIS”) to assess a parcel’s development potential given site conditions, including size of the site, and constraints such as steep slopes, shallow depth to bedrock, aquatic and ecological resources, and zoning. Specific project examples demonstrating my expertise in this area include:

- French Hill Golf Course, Trump Organization. Town of Yorktown, Westchester County, NY. Corps of Engineers Alternatives Analysis. Developed an analysis to rebut a standard presumption in the Corps of Engineer regulations that there was a project site available for a golf course development that would have less impacts on the aquatic environment than the proposed project site. To complete this review, I directed the use of GIS to identify alternative sites that were available for development at the time that the golf course was proposed and reviewed whether they were of an adequate size, and unconstrained by aquatic resources, steep slopes, and depth to bedrock to support a proposed golf course.
- Washington County Jail Study. Washington County, NY. Reviewed sites in Washington County, screened and selected using GIS, for their ability to support proposed relocated jail given parcel size, slope, aquatic resource and ecological issues.
- Silo Ridge Golf Resort Community. Town of Amenia, Dutchess County, NY. Worked with engineers to review and document developable areas of a project site (screening out constrained areas for residential development, taking into consideration slopes, depth to bedrock, wetland and ecological issues).
- Witbeck Subdivison. Town of East Greenbush, Rensselaer County, NY. Prepared SEQRA Draft Environmental Impact Statement and Final EIS that discussed the feasibility of developing lots in a residential subdivision given steep slopes, wetlands and ecological resources, and means to mitigate those potential impacts.
- Valley Health (Bassett Health Corporation) Assisted Living Facility. Herkimer County, NY. Worked with project design engineer to evaluate a number of alternative sites for site suitability/constraints given project program size requirements.
- Saugerties Winston Farm Tax Certiorari Case. Prepared a Development Suitability Analysis for our client, the Town of Saugerties for a property (the Woodstock '94 Festival Property) that reviewed existing site conditions, including steep slopes, depth to bedrock, hydric soils, wetlands and streams, steep slopes, depth to bedrock, surface waters and wetlands, FEMA Floodplains, ecological resources, cultural resources, road access and frontage, and utilities.

II. Review of Village of Pomona's Wetlands Protection Law ("WPL") and comparison of Village's WPL with other WPLs.

9. As stated on my CV, I assisted in the development of the Association of State Wetland Managers' Wetlands and Watershed Protection Toolkit (see <http://www.aswm.org/watersheds/69-toolkit/887-23lands-and-watershed-protection-toolkit>, Acknowledgements) which included local wetland laws and model ordinances.

10. While at Chazen, I have reviewed local wetland protection laws and/or prepared or directed the submittal of permits for local wetland reviews. These have included local wetlands protection laws in the Town of Rhinebeck (Gardens at Rhinebeck); Town of Poughkeepsie (Clear Channel Broadcasting); Town of Wappinger (a driveway); Village of Croton (water supply); Town of Southeast (Peaceable Hill Water District); and Town of East Fishkill (Orthopedic Associates; Broccoli Continental Commons).

III. Relevance of educational institutional laws (accreditation, housekeeping facilities, no family student housing, 20% dormitory limitation, one dormitory building limitation) to environmental impacts (wetlands, flooding and floodplains, stormwater systems, plant life/wildlife).

11. While at Chazen, I have assessed the environmental impacts of many different kinds of development projects, including educational and residential developments, and have prepared, directed the preparation of, or reviewed documents prepared by others that address environmental impacts to aquatic resources, flooding and floodplains, stormwater systems, and ecological resources from the construction and operation of these projects.
12. As the Director of Natural Resource Services, I am Chazen's Technical Lead for wetlands and ecological resources on our multi-disciplinary teams for municipal and land development projects. In that role, I commonly collaborate with our design engineers, project managers, and planners to discuss land use regulation impact on project design as well as alternative designs, layouts and operations that could meet regulatory requirements and/or avoid and minimize impacts on wetland, ecological and other natural resources.
13. Additionally, the issues of location and design of stormwater management facilities are often closely linked with aquatic resources. The NYSDEC General Permit for Stormwater also requires that the Stormwater Pollution Prevention Plan review potential impact to

wetlands, ecological and cultural resources. Given these conditions and requirements, I regularly provide guidance to Chazen engineers on stormwater system and outfall siting and possible impacts to wetland and ecological resources.

14. I also have experience in the review of ecological resources under the federal Endangered Species Act (both Section 7 and Section 10), the NYSDEC Endangered Species Regulations at 6 NYCRR 182, and under New York's SEQRA.

15. Specific project examples demonstrating my expertise in these areas include:

- SUNY-Oswego Swetman/Poucher Renovation Project (academic space, faculty meeting space). I prepared SEQRA Expanded Environmental Assessment Form for review and use by the Dormitory Authority of New York State (DASNY).
- Culinary Institute of America Student Housing and Hotel, Hyde Park, Dutchess County, NY. I reviewed potential impacts to wetlands, streams, endangered species habitats and general ecological resources, and New York Coastal Zone for these two proposed projects. Worked with Chazen engineers to review impacts of alternative building layouts and roadways. Completed regulatory assessments and prepared NYSDEC permit applications.
- Ft. Ontario US Army Reserve Center Expansion Project, Oswego, NY for a 100-member two story Army Reserve Center, Organizational Maintenance Shop and storage building. I prepared National Environmental Policy Act (NEPA) Environmental Assessment (EA) and Finding of No Significant Impacts (FONSI) for 77th Regional Support Command, Office of the Deputy Chief of State Engineer, Environmental Division.
- Valley Health (Bassett Health Corporation) Assisted Living Facility. Herkimer County, NY. Worked with project design engineer to identify ways to avoid and minimize impacts to aquatic resources from the proposed assisted living facility, road and stormwater management facilities.
- Silo Ridge Golf Resort Community. Town of Amenia, Dutchess County, NY. Worked with engineers to review impacts of project and alternative layouts of residential housing on slopes, wetlands and ecological resources and the interface of stormwater management with those resources. I was part of a multi-disciplinary team that documented these reviews in SEQRA EIS Documents. Coordinated comments with the Town of Amenia with the Town planner, engineers and environmental scientists.
- Savannah Hudson International Business Park, Town of Montgomery, Orange County, NY. Reviewed construction and operational impacts of a warehouse/office building and access roads on wetlands and ecological resources. Worked collaboratively with

Chazen engineers to examine potential impacts from stormwater and sewage treatment systems on wetland and ecological resources and documented these efforts in SEQRA EIS documents.

- NYSDOT Court of Claims Case #123499. Town of Marcy, Oneida County, NY. I directed the review and delineation of wetlands, waters, floodplains and floodways on the development potential of a 14-acre property and prepared an expert witness report, in collaboration with Chazen surveyor and engineer for use by the NYSDOT in a takings claim.
- Kajima Associates, Village of Harriman, Orange County, NY. Led Chazen's team to complete a due diligence review of a 20-acre property with an existing warehouse and parking area for Takasago International USA. The due diligence review covered Phase 1 Environmental Site Assessment and Report Preparation, wetlands and watercourses, FEMA Floodplains, Endangered and Threatened Species Assessments, Traffic Assessment, Jurisdictional Permits and Approvals. I then coordinated with Chazen Surveyors to provide a floodplain elevation certificate for Kajima Associates, and worked with Chazen engineers on redevelopment of the site for Takasago.
- Lake George Association West Brook Conservation Initiative - Natural Stormwater Treatment Area. Town and Village of Lake George, Warren County, NY. Led a multi-disciplinary team in the initial review of various stormwater practices including sediment forebay, detention pond, wetlands, and gravel wetlands to treat first flush runoff from the Route 9 South Corridor on the prior Charles R. Wood Gaslight Village Property. Served as Client Manager during the Engineering Design Phase.
- Golub (Price Chopper) Corporation Dunnsville Road Relocation and Warehouse Expansion, Town of Rotterdam, Schenectady County, NY. Technical lead for review of project impacts on ecological resources including possible pine barren habitat, wild blue lupine and Karner blue butterflies, and wetlands. Prepared ecological resource portions and assisted in preparation of other portions of SEQRA EIS for the project.
- Widewaters Kinderhook Shopping Plaza. Town of Kinderhook, Columbia County, NY. Led the development of a SEQRA Supplemental and Final EIS for a Hannaford Shopping Plaza and new roundabout at the Route 9/9H intersection. Coordinated engineering and architectural design consultants in the development of materials for inclusion in the SDEIS and FEIS. Represented the client before the Town of Kinderhook Planning Board.
- National Grid Habitat Conservation Plan (HCP) under Section 10 of the federal Endangered Species Act. Prepared National Grid's HCP for Karner blue butterfly and frosted elfin for their ROWs in the Albany and Rome Sand Plains for approval by the US Fish and Wildlife Service, NYSDEC and National Grid.
- Roosevelt Fire District Habitat Assessment and NYSDEC Incidental Take Permit for Blanding's Turtle. Hyde Park, Dutchess County, NY. Directed the review of habitat for potential turtle use and habitat assessment report preparation, led consultation with

the NYSDEC, and prepared Incidental Take Permit with mitigation under 6 NYCRR 182.

- Landing Woods at Ulster LLC. Town of Ulster, Ulster County, NY. Directed the wetland delineation of 31-acre site for 84-unit residential townhouse development, and obtained validation. Prepared Nationwide permit 14 Pre-Construction Notice (PCN) for proposed roadway in wetlands. Worked with project engineer to reduce road footprint using retaining walls. Developed Indiana Bat habitat assessment and developed Endangered Species Act Section 7 consultation materials for inclusion in PCN. Obtained all necessary permits.

IV. The urban nature of the Village.

16. Given my past experience with the Ft. Ontario U.S. Army Reserve Center Expansion Project (§ 15, above), where I reviewed the project siting relative to environmental justice issues, I was surprised by the Village's description of its jurisdiction as "rural."
17. Based on my research, I reviewed the US Census website, which correlated the terms Urban, Urban Cluster and the default category, Rural, to population densities, both through mapping and actual definition. As stated in my first declaration, and in the simplest terms, urban areas are defined by the US Census Bureau as areas having population densities greater than 1,000 people per square mile.
18. I then reviewed the mapping in the US Census Bureau website relative to the boundaries of the Village of Pomona. The Village of Pomona is mapped as being located in an urban area. Mathematically, the Village of Pomona boundaries encompass 1,521 acres, or 2.4 square miles. The Village of Pomona is identified as having a population of 3,103 persons per the 2010 census. This includes 1,751 persons in Rockland County Tract 105.03, Block 1, and 1,352 persons in Rockland County Tract 115.01, Block 1. When one divides 3,103 people by 2.4 miles, the population density is 1,293 people/square mile, which is higher than the 1,000 persons per square mile density that the US Census Bureau classifies as Urban.

19. The identification of the Village of Pomona as “urbanized” was further collaborated by the NYSDEC’s “Estimated Populations within Urbanized Areas for MS4s,” which is the NYSDEC’s “*map of 2010 urbanized areas in NYS identified by the U.S. Census bureau. The map includes the estimated populations (based on the 2010 U.S. Census Data) within the 2010 urbanized areas for Municipal Separate Storm Sewer Systems (MS4s).*” See <http://www.dec.ny.gov/pubs/42978.html>. The map displays as a Google Earth overlay, and shows that the Village of Pomona boundaries lie within the MS4 zone.

V. Methodology of desktop reviews.

20. Geographic Information Systems allows for the review of a series of data (*i.e.*, soils, streams and wetland mapping, parcel boundaries, satellite photographs) layered in one map all to the same scale (*i.e.*, georeferenced).
21. This data can be reviewed one layer at a time in a non-GIS format.
22. Review of such data, along with aerial photography, is commonly called a “desktop mapping review.”
23. Desktop mapping review is not only accepted methodology in my field, but standard practice in the wetland science profession because these reviews provide key information about aquatic resource conditions within the study area, such as: A) where confirmed wetlands and streams will likely be found within the study area; B) which agencies likely regulate those aquatic resources; C) the potential of locating other otherwise unmapped aquatic resources in the study area; D) the likely size and extent of those otherwise unmapped resources and whether they have hydrological connections to interstate waters, and thus if they would be regulated by the NYSDEC or Corps of Engineers; and E) the

wetland plant communities and/or stream characteristics, and relationships to other resources which influences functionality.

24. Regarding item C described above, professionals in my field use the GIS data layers combined with a review of aerial photography to determine if an otherwise unmapped location appears to have positive indicators of the three parameters for wetlands (mapped hydric soils, evidence of wetland or stream hydrology and wetland plant layers as seen in aerial photography). See Exhibit A attached hereto, *Desktop Reviews for Aquatic Resource Assessments*, a true and correct description of desktop reviews in greater detail. This applies to paragraphs 28, 40, 82-112 of my January 19, 2015 Declaration.

VI. Use of aerial photography.

25. The review of photographs taken from above the land is also a standard practice in the wetland profession. These photographs can include satellite imagery (termed orthophotos) that are often georeferenced into GIS. They can also include desktop aerial photography available through Google Earth and BING Bird's-eye view.
26. The use of these types of photographs is standard practice in our profession because: A) they provide incredibly detailed information about a site; B) they allow a wetland scientist to become familiar with site characteristics before visiting the site; C) they can provide information about hydrology and plant indicators; and D) they can provide information about the current and past history of the site including previous and on-going impacts to aquatic resources, and how the site has changed over time. See Exhibit B attached hereto, *Use of Aerial Photographs (Bing Bird's-Eye View) For Identifying Potential Regulatory Violations*, a true and correct description of the use of aerial photographs in greater detail.

This applies to paragraphs 43, 85, 99, 102, 103, 150, and 157 of my January 19, 2015

Declaration.

27. I declare under penalty of perjury, that the foregoing is true and correct.

Executed on: May 20, 2015


Barbara B. Beall, PWS, LEED® AP